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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/878,230	06/12/2001	Kenneth C. Budka	2925-0551P	2080
30594	7590	06/03/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			PICH, PONNOREAY	
P.O. BOX 8910			ART UNIT	
RESTON, VA 20195			PAPER NUMBER	
			2135	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/878,230

Applicant(s)

BUDKA ET AL.

Examiner

Ponnoreay Pich

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/11/2005
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-2 and 12 have been amended. Claims 1-18 are pending.

Response to Amendment

In light of applicant's amendments to the specification and drawings filed on 4/11/2005, the examiner withdraws the objections made in the previous office action. The examiner also withdraws the previous office action's 112, second paragraph rejections in light of applicant's amendments.

Response to Arguments

Applicant's arguments filed 4/11/2005 have been fully considered but they are not persuasive. Applicant's arguments are directed towards independent claim 1.

Applicant first states that He et al is concerned with a number of failed authentication attempts and log-in attempts and authentication and logging-in are not the same as the user requesting a communication address. Therefore, applicant believes that He et al does not disclose processing the communication address request based on a failure count accessed using the identifier for the user equipment. The examiner asserts that He et al is directed towards a security system for user access to network elements and a network (col 1, lines 55-56 and col 3, lines 10-15). In col 3, lines 10-15 He et al discloses how a user can dial up a server to have access to a network. To have access to a network, the user **must** obtain a communication address, i.e. IP or network address. The examiner also notes that although He et al disclose that it is the user making the request, as the user must use a user equipment to make the request, inherently from the network's perspective, the request is coming from the user

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equipment. Column 17, lines 13-17 cited by the examiner shows how after a certain number of failed authentication attempts (to log on to a network/obtain a communication address) the account is brought to an administrator's attention. The examiner believes this meets the limitation of processing the request based on a failure count. The identifier of the user equipment is also inherently whatever identifier the user used to make the request (i.e. perhaps a user id, other type of account identifier, and/or password).

Applicant then states that Asokan does not disclose processing the communication address request based on a failure count accessed using the identifier for the user equipment. The examiner did not use Asokan to show this limitation. The examiner used He et al.

Applicant then cited two cases which state that the examiner must provide particular findings as to why the two pieces of prior art are combinable and that broad conclusory statements standing alone are not evidence. Basically, the applicant is arguing that the examiner did not have proper motivation to combine He et al and Asokan. The examiner notes that on p12, lines 8-10 of applicant's arguments that the applicant lists three sources from which motivation to combine art references can come:

1. The statements in the prior art (patents themselves),
2. The knowledge of one of ordinary skill in the art, or in some cases,
3. The nature of the problem to be solved.

The examiner asserts that the He et al's invention was directed towards a security system for a network. He et al did not explicitly disclose that the request was coming from a user equipment, although this was inherent. Therefore, the examiner cited passages from Asokan showing explicitly that a user equipment, i.e. node, can make a request for an address (p1, paragraph 9). Asokan discloses address acquisition in a network. He et al discloses security for a network. The examiner believes that the fields disclosed by He et al and Asokan are similar—they both deal with computer networks. As the examiner used Asokan to show explicitly what was inherent to He et al (that the request from the user also counts as a request from a user equipment), the examiner believes that the motivation the examiner provided was sufficient to show that one of ordinary skill would have had reasons to combine the two teachings. That is, “when receiving any sort of request for use of resources in network,” one of ordinary skill would be motivated “to also process the request based on a failure count using the identifier” (of the user equipment) “as this would prevent a brute force authentication attack on the network by the user equipment.” Brute force attacks are well known in the art, so this motivation comes from knowledge of one of ordinary skill in the art and from the nature of the problem to be solved by He et al, i.e. providing a security system for a network (col 1, lines 55-56).

Applicant then argues that the two environments and corresponding objectives for He et al and Asokan are dissimilar. The examiner asserts that He et al was concerned with providing security for a computer network (col 1, lines 55-56). Asokan disclosed a GPRS system, but that system still comprises computing devices, therefore

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the GPRS system is still a computer network. Asokan's objective related to address acquisition (p1, paragraph 1, line 1). He et al was also concerned controlling access to network resources (col 1, lines 55-59). An address is a network resource. Therefore, the environments and objectives of He et al and Asokan are not dissimilar as applicant has asserted.

Applicant then states that the examiner used impermissible hindsight reconstruction to reject the claims. The examiner has already stated how the examiner was only using Asokan to show explicitly what was inherent to He et al already. Further, the examiner gave proper motivations for combining the two prior arts, therefore the examiner does not believe that any hindsight was used to reconstruct the limitations of claim 1.

In light of the above, the examiner asserts that the examiner's previous rejection of claim 1 was proper. As applicant did not argue any of the dependent claim rejections, the examiner assumes applicant agrees with their rejection. Therefore, the examiner's rejections of the dependent claims are maintained. The examiner will copy and paste the previous office action's rejection below and modify where necessary to reflect any claim amendments on the part of the applicant.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 8-10, 12, and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over He et al (U.S. 6,088,451) in view of Asokan et al (U.S. 2001/0017856).

1. Claim 1: He et al disclose a method for protecting use of resources in a network comprising, processing a request for network resource based on a failure count accessed using the identifier for the user equipment, the failure count indicating a number of times the user equipment has been denied registration (col 17, line 13-17 and col 26, lines 40-52). He et al does not explicitly disclose receiving a communication address request for a temporary communication address from user equipment, the communication address request including an identifier of the user equipment. However, a request by user equipment for a communication address has been known to one of ordinary skill in the art at the time of the applicant's invention. It is also known by one of ordinary skill that the request can include the user equipment's identifier, which is used for authenticating whether or not the user equipment has rights to access a network resource. Further, requests of such nature are also explicitly disclosed by Asokan et al (p1, paragraph 0009 and p9, claim 11). A communication address is itself a network resource. One of ordinary skill would be motivated, when receiving any sort of request for use of resources in a network, to not only require an equipment identifier be sent with the request, but to also process the request based on a failure count

using the identifier as this would prevent a brute force authentication attack on the network by the user equipment. The examiner has interpreted authentication attempts to be the same thing as registration attempts.

2. Claim 2: He et al disclose the method of claim 1, wherein the processing step comprises:

- a. Accessing the failure count for the user equipment based on the identifier (col 17, line 13-17 and col 26, lines 40-52).
- b. Ignoring the communication address request if the failure count exceeds a predetermined threshold (col 17, line 13-17 and col 26, lines 40-52).

The examiner has interpreted an identifier as any sort of user id, password, serial number, network account, or MAC address associated with the user equipment which uniquely identifies the user equipment.

3. Claim 3: He et al disclose the method of claim 2, wherein the processing step comprises continuing with a registration process if the failure count does not exceed a predetermined threshold (col 17, line 13-17 and col 26, lines 40-52).

4. Claim 4: He et al disclose the method of claim 4, further comprising incrementing the failure count for the user equipment if during a registration process the user equipment is not authenticated (col 17, line 13-17 and col 26, lines 40-52). It is inherent that since He et al discloses the number of failures can reach a certain predetermined threshold that the failure count must increase when the user equipment fails to authenticate properly.

5. Claim 9 and 16: He et al disclose the method of claim 3 and claim 1 respectively, wherein a processing step continues a registration process if a failure count does not exist for the user equipment (col 26, lines 40-52). He et al disclosed that it is possible for the user equipment to not be found in a registration database, which means there would also be no failure count for that user equipment.
6. Claims 10 and 17: He et al disclose the method of claim 9 and claim 16 respectively, further comprising:
 - a. Incrementing the failure count for the user equipment if a failure count was accessed and if during the registration process the user equipment is not authenticated (col 26, lines 40-52).
 - b. Initializing a failure count for the user equipment to an initial value if a failure count does not exist for the user equipment and if during the registration process the user equipment is not authenticated (col 26, lines 40-52).
7. Claim 12: He et al disclose the method of claim 1, further comprising incrementing the failure count for the user equipment if during a registration process the user equipment is not authenticated (col 26, lines 40-52).
8. Claims 8 and 15: He et al disclose the method of claim 4 and claim 12 respectively, further comprising decrementing the failure count after a predetermined period of time (col 17, lines 13-17). The examiner has interpreted the time for an examination of the account to be complete to be a

predetermined period of time. In this case, it is inherent that since He et al disclose the account being only temporarily disabled that the failure count must be decremented at some point in time. Further, the examiner would like to note that one of ordinary skill in the art at the time of the applicant's invention would most likely recognize the advantage of automatically decrementing the failure count after a certain predetermined time period as this would allow a legitimate user of the account to be able to log on without an administrator's intervention after their account is temporarily disabled either by them or someone else. For a large enough user or equipment base in a network, if the administrator had to get involved with every single investigation before valid accounts are re-enabled, it could turn into a very time consuming task for the administrator.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over He et al (U.S. 6,088,451) in view of Asokan et al (U.S. 2001/0017856) and Holmes et al (U.S. 6,230,009).

1. Claim 11: He et al do not disclose a method claim 10, wherein the user equipment is a mobile station in one of a data network and a wireless voice network. However, Holmes et al disclose a communication network consisting of a mobile station in a data and wireless voice network (col 1, lines 23-26). One of ordinary skill in the art would be motivated to implement a security feature in the communication network disclosed by Holmes et al

which keeps track of a registration failure count of a user equipment as this would make the network more secure and protect resources in the network.

Claims 5, 7 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over He et al (U.S. 6,088,451) in view of Asokan et al (U.S. 2001/0017856) and Nawrocki (U.S. 6,256,116).

1. Claims 5 and 13: He et al do not disclose the method of claim 4 and claim 12 respectively, further comprising sending a message to the user equipment instructing the user equipment not to attempt registration for a predetermined period of time if the incremented failure count equals or exceeds the predetermined threshold. However, sending a message to a user instructing him/her to stop trying to authenticate/register for a predetermined amount of time after a predetermined failure-to-authenticate count has been reached is known to one of ordinary skill in the art at the time of the applicant's invention. Further, Nawrocki discloses a request-to-stop transmission attempts being sent by a facsimile-blocking device to a facsimile machine (col 1, lines, 35-44). One of ordinary skill would recognize that it would be advantageous to send a request-to-stop transmission for a predetermined amount of time message to the user equipment whose registration attempts has reached or exceeded a predetermined failure threshold as it would save network resources if the user equipment followed the message's instruction. The examiner has interpreted any authentication or registration attempts by the user equipment as a type of transmission by the user equipment.

2. Claims 7 and 14: He et al do not disclose a method of claim 5 and claim 13 respectively, further comprising decrementing the failure count after a predetermined period of time has elapsed from a sending step. However, He et al disclose decrementing the failure count after a predetermined period of time (col 17, lines 13-17). It would make sense to start the count down of when to decrement the failure count from the point in which the message was sent as this would most likely coincide with the time when the failure threshold was reached. The examiner would like to note that there is no way to guarantee that the user equipment will follow the instruction to not try to register again for a certain time period as the user equipment could be outside the control of the network with which it is trying to register.

Claims 6 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over He et al (U.S. 6,088,451) in view of Asokan et al (U.S. 2001/0017856), Holmes et al (U.S. 6,230,009), and Nawrocki (U.S. 6,256,116).

1. Claims 6 and 18: He et al do not disclose a method of claim 5 and claim 1 respectively wherein the user equipment is a mobile station in one of a data network and a wireless voice network. However, Holmes et al disclose a communication network consisting of a mobile station in a data and wireless voice network (col 1, lines 23-26). One of ordinary skill in the art would be motivated to implement a security feature in the communication network disclosed by Holmes et al which keeps track of a registration failure count of a

user equipment as this would make the network more secure and protect resources in the network.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

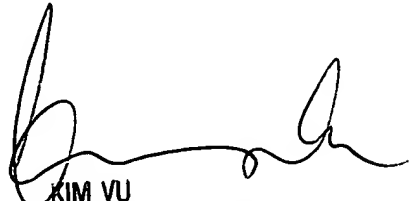
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ponnoreay Pich whose telephone number is 571-272-7962. The examiner can normally be reached on 8:00am-4:30pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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